

# Authorizing and Submitting a Migration Event

After a migration event is defined, it may be authorized and then submitted as described in the following sections.

This chapter covers the following topics:

- Authorizing a Migration Event
  - Submitting a Migration Event
  - Backing Out an Incomplete Migration Event
  - Migration Event Audit Report
  - Migration Processing and Monitoring
- 

## Authorizing a Migration Event

Before a migration event can be submitted, it must be authorized by the authorizer(s) assigned on the migration path. Refer to Migration Paths for information about designating authorizers.

Only a migration event with a processing state of Pending or Validated can be authorized. The authorization request takes a Pending event through the Validated state automatically.

Migration events may be authorized

- online from the Modify Event screen;
- in batch mode using commands; or
- by using Application Program Interface (API) calls.

Refer to the PAC Reference documentation for more information about APIs.

## Removing an Authorization

If an attempt is made to update a migration event that has been authorized, a warning message is issued and the update is interrupted until the authorization(s) has been removed.

To remove an authorization, type Y (Yes) in the window that contains the error message.

## Authorizing a Migration Event

### Step 1. Accessing the Modify Event Screen

On the Migration Event Menu, enter Code M (Modify an Event) and the name of the migration event you wish to modify.

The Modify Event screen appears:

```

08:20:30          ***** PREDICT APPLICATION CONTROL *****          2000-05-01
User PACUSR              - Modify Event -

Event ..... ANEVENT                      Modified: 1997-05-01 by SAGXX
Keys ..... /
Application .. ORD-EXAM
From Status .. CONTROL
To Status .... DEVELOPMENT
Exec Mode .... COPY Objects Batch Using Workfile WITH No Replace
Scheduled .... 1997-05-01 at 21:18:04
Replace ..... N
Notes ..... Event migrates a batch of objects from Control back to
              development
              _____

Maintenance Request .. _____
Processing State ..... Validated
Validate List ..... N
Additional Options ... N

Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help  Menu  Exit  Opts  Auth          ObLst                      Canc

```

**Note:**

The PF5 (Auth) key does not appear on the Modify Event screen if you are not allowed to authorize the event. Possible reasons can be that permission is not granted, or the Separate Authority option is in effect.

**Step 2. Accessing the Migration Event Authorization Screen**

On the Modify Event screen, press PF5 (Auth), or enter AUTH on the command line.

The Migration Event Authorization screen appears:

```

15:10:24          ***** PREDICT APPLICATION CONTROL *****          2000-05-01
User PACUSR              - Migration Event Authorization -

Event ..... ANEVENT

From Status .... CONTROL
From Location .. * PACS *   (235,010)    PREDICT .. (235,015)
To Status ..... DEVELOPMENT
To Location .... ORD-DEV   (100,010)    PREDICT .. (100,010)

Batch/Online ..... B      Workfile Usage ..... Y
Copy/Move/Include .. C      Replace ..... N
Job ..... NATURAL_MIGRATE_WORKFILE
Auto Expansion .... N
Expand Status .....

Applmods ..... N

Enter CONFIRM or press 'PF5' to Authorize

Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help  Menu  Exit          Confm                      Canc

```

The values for the attributes on the Migration Event Authorization screen were set when the migration path was defined.

The following attributes cannot be modified on this screen:

- name of the migration event to be authorized;
- origin and destination statuses and their locations;
- origin and destination locations of the Predict objects.
- physical location of foreign datasets.

The attributes described in the following table are modifiable depending on the migration path (From/To statuses):

Attribute	Description
Applymodes	Applymodes in effect for the current migration event.
Auto Expansion	The type of object expansion to be performed.
Batch/Online	Whether the job is to be run in batch or online. The execution mode (batch/online) options were specified when the migration path was defined.
Copy/Move/Include	Copy/move/include options.
Expand Status	(Optional) The name of the Expand status.
Job	The job name for a batch migration.
Replace	Y indicates that objects that exist in the destination status are to be overridden (replaced) with the object being migrated. N indicates that objects are not to be replaced.
Workfile Usage	Y indicates that objects are to be unloaded to an intermediate work file during event processing. N indicates that objects are to be migrated directly without using an intermediate work file. This is not valid for Predict objects. For Predict migrations, Workfile Usage is not applicable/displayed. This attribute is protected in some cases, for example, for migration paths Control to Archive, or Archive to Control.
Translation Table	(If applicable) The translation table (FTT) to be used when objects are migrated into the application status.

### Step 3. Specifying Online or Batch

Specify whether the migration event is to be run online (O) or in batch (B).

If batch is specified, a job name must be supplied in the Migration Job field.

**Note:**

Predict application migrations and Archive events must always run in batch.

### Step 4. Specifying a Work File for a Batch Migration

For batch migration, specify Y if a work file is to be used during migration; if not, specify N.

**Note:**

For Archive migrations, Y must be specified.

## Step 5. Specifying a Job

A job name must be provided for batch migration; otherwise, the event cannot be authorized. You may override the job name, if necessary. For more information on jobs, see Appendix B.

## Step 6. Specifying Copy, Move, or Include

In the Copy/Move/Include field, enter the following:

**Enter... If...**

---

C	objects are to be copied from the origin status. When input is from a work file, C is always used for origin statuses of Archive, Control, Incorporation, production and development status types.
M	objects are to be moved from the origin status. For Archive and Retire status types, M is always specified and the field protected.
I	the origin status input is to be included from a previously created work file. This is valid only for batch events with an origin status type of development or incorporation.

## Step 7. (Optional) Specifying Auto Expansion and Expand Status

Enter a valid auto-expansion type in the Auto Expansion field as follows:

**Code Type of Expansion**

---

C	Include all subordinates (compile time objects: data areas, copy code, maps, and views).
E	Include all subordinate and referenced objects (combination of R and C).
R	Include referenced objects (programs, maps, subprograms, subroutines, help routines, GDAs).
U	Include Used By objects (objects that use or reference the object).
N	Do not auto-expand.

For detailed information about valid auto-expansion types, refer to Creating and Validating an Object List.

If you entered an auto-expansion type, enter the Expand status in the Expand Status field.

## Step 8. (Optional) Specifying a File Translation Table (FTT)

In the Translation Table field, enter the name of the FTT to be used when the objects are migrated.

The database and file numbers will be changed in the Natural object to conform with the physical environment.

## Step 9. (Optional) Switching On Applymods

Applymods for a migration event are determined at the time the migration event is created.

1. In the Applymods field, enter Y (Yes) to access a list of applymods.

The Modify Event Applymods screen appears as shown in the following example:

```

14:50:24          ***** PREDICT APPLICATION CONTROL *****          2000-07-01
User PACUSR          - Modify Event Applymods -

                                     Modified: 1997-05-01 by SAGXX

Used      Number      Description
-----
N          2          Do not optimize size of Cataloged object
Y          3          Allow Reload of an Archive Object
N          4          Suppress Audit Report creation during Migration
N          5          Suppress GDA Auto Expand during Migration.
N          6          Migrate objects only previously Migrated.
N          7          Not assigned.
Y          8          Force all Views/LDAs/PDAs to be unloaded during Migration.
N          9          Expand facility should select for Languages 1-9 on Maps.
N         10          Migrate objects to a status only if they have changed.
N         12          Do not Supersede Objects with an Older Date-Time Stamp.
N         13          Perform recursive auto expand for expands from T/P Statuses.

Enter options (above), or '?' (help) or '.' (exit): __

Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help  Menu  Exit  Date      --      -      +                      Canc

```

The Used column on the Modify Event Applymods screen is described as follows:

#### Code Explanation

Y	The applymod is active for the event. This field is protected because the PAC administrator has set
(A)	this applymod to A (activated), therefore, Y cannot be overridden.
N	No, but can be overridden.
Y	Yes, but can be overridden.
N	The applymod is not active for the event. (This field is protected because the PAC administrator has
(D)	set this applymod to D (deactivated), therefore, N cannot be overridden.

2. Type Y (Yes) over the default in the Used column for each applymod to be switched on during processing of this migration event; then press ENTER to confirm.
3. Press PF3 to return to the Migration Event Authorization screen.

## Step 10. Authorizing the Event

On the Migration Event Authorization screen, enter Confirm and press ENTER, or press PF5, to authorize the migration event. The message "Migration event has been authorized" appears on the Migration Event Menu screen.

## Displaying Migration Event Authorization Information

15:03:48	***** PREDICT APPLICATION CONTROL *****	2000-05-11
User PACUSR	- Migration Event Authorization -	
Event .....	NEWEVENT	
From Status ....	INCORPORATION	
From Location ..	ORD-EXAM (221,021)	PREDICT .. (221,022)
To Status .....	TEST	
To Location ....	ORD-TEST (221,021)	PREDICT .. (221,022)
Batch/Online .....	B	Workfile Usage .....Y
Copy/Move/Include ..	C	Replace .....N
Job .....	NATURAL_MIGRATE_WORKFILE	
Auto Expansion .....	N	
Expand Status .....		
Applymods .....	N	
Authorized by .....	TID ..	
Authorized Date ....	00-01-02 at 00:00:00	
Command ==>		
Enter-PF1---	PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---	
Help	Menu Exit	NNat Canc

Information about the migration event authorization is displayed on the Migration Event Authorization screen above. The Migration Event Authorization screen displays the following:

Field	Description
Workfile Usage	Work file usage option Whether the objects in the object list are to be unloaded to a work file.
Job	Batch migration event job name.
Auto Expansion	Whether the auto expansion facility was selected for the object list.
Expand Status	The name of the Expand status (if specified).
Applymods	Applymods migration event authorization Applymods used. Type Y over the N default to display the applymods for this migration event.
Authorized By	User ID and terminal ID number of the user who authorized the job.
Authorized Date	Date and time the event was authorized.

## Submitting a Migration Event

Migration events may be submitted in batch or online from the Migration Event Submission screen; or in batch using direct commands (in an MVS environment only). PAC supplies an applymod for submitting migration events. You may also use an API to submit an event.

## Using the Migration Event Submission Screen

## Step 1. Accessing the Migration Event Submission Screen

Enter Code U (Submit a Migration Event for Processing) and the appropriate migration event name on the Migration Event Menu.

The Migration Event Submission screen appears:

```

08:26:21          ***** PREDICT APPLICATION CONTROL *****          2000-05-01
User PACUSR          - Migration Event Submission -

Event ..... ANEVENT                      Modified: 2000-05-01 by SAGXYZ
Keys ..... /
Application .. ORD-EXAM
From Status .. CONTROL
To Status .... DEVELOPMENT
Exec Mode .... COPY Objects Batch using Workfile WITH No Replace
Scheduled .... 2000-05-01 at 08:26
Job ..... MIGRATE_NATURAL_WORKFILE
Notes ..... Event migrates a batch of objects from Control back to_____
                development_____

Maintenance Request .. _____
Processing State ..... Authorized

Additional Options ... N

PAC7274: Enter 'SUBMIT' to initiate Event.
Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10---PF11---PF12---
      Help  Menu  Exit  Opts                      ObLst Auth          Sub          Canc

```

The Migration Event Submission screen example above indicates a batch submission: The Exec Mode field specifies "COPY Objects Batch Using Workfile...", and the job for the batch migration is also displayed.

For online events, the Exec Mode field would indicate the type of online migration (for example, Copy Objects Online WITH Replace), and the Job field would not be displayed.

You may not modify the fields on this screen, but you may access the Additional Options to review information about the event before submitting it, including the object list, authorization information, job information.

The PF7 (ObLst) key allows you to display the object list directly. The PF8 (Auth) key displays the Migration Event Authorization screen where you can review/modify applymods associated with the migration event.

### Note:

For a nonproduction event, if the schedule date is set for a future time, the event will not be submitted. The message "Submit not possible - check schedule date" is displayed on the Migration Event screen.

## Step 2. Submitting the Event

### Batch Mode

When submitting a Predict event, the Submit Predict Event window appears:

```

08:26:21          ***** PREDICT APPLICATION CONTROL *****          2000-05-01
User PACUSR          - Migration Event Submission -

Event ..... ANEVENT                      Modified: 2000-05-01 by SAGSI
Keys ..... / / / / / / / / / / / / / / / /
Application .. +-----+
From Status .. |          - Submit PREDICT Event -          |
To Status .... |                                          |
Exec Mode .... | If AUTO=OFF parameter is in use by      |
Scheduled .... | the Natural nucleus, running this PREDICT  |
Job .....     | migration Event, please specify the     |
Notes .....    | following additional information:         |
               |                                          |
               | AUTO=OFF Parameter In Use ... N         |
               | User Id ..... SAGSIBAT                   |
Maintenance Req| Password .....                               |
Processing Stat|                                          |
               +-----+
Additional Options ... N

PAC7274: Enter 'SUBMIT' to initiate Event.
Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help  Menu  Exit  Opts                ObLst Auth                Sub                Canc

```

If running in a Natural Security environment, you may specify required security options. The AUTO=OFF parameter can be set for all steps of the migration. If AUTO=OFF is specified, all steps must be performed in a security environment; also, the user ID and password must be specified.

1. Enter SUBMIT on the command line, or press PF10 (Sub).

When the job is accepted for processing, the Migration Event Job Information window appears:

```

17:26:07          ***** PREDICT APPLICATION CONTROL *****          2001-05-03
User UKMJ          +-----+
               --- Migration Event Job Information ---
Event ..... UKMJ_
Application . UKMJ_   Job ..... OS_MIGRATE_WORKFILE
From Status . UKMJ_
To Status ... CONTR  Submitted ..... 2001-05-03 at 17:26:09 by UKMJ
Exec Mode ... COPY   Started ..... 2001-05-03 at 17:26:09
Scheduled ... _____ Ended ..... at
               Step number ..... 0
Notes ..... _____
               _____
               _____
Maintenance Reques   Migration Totals
Processing State .   NATURAL Objects ..... 0
                   FOREIGN Objects ..... 0
                   ErrMsg Objects ..... 0
                   PREDICT Objects ..... 0
Additional Options   Error Count ..... 0
               Refresh ..... Y
PAC7274: (I) Enter   PAC1163: (I) Job SAGSUB has been submitted
Command ==>
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help  Menu  Exit  Opts                ObLst Auth                SUB                Canc

```



The information on the screen indicates that a batch job has been submitted to migrate objects using a work file.

The Migration Event Job Information windows displays the following information:

- The name of the job used to process the migration event.
  - The date and time the job started and ended; incomplete information in the Ended field indicates that the job is in process.
  - The Step Number field displays each step number completed as the job progresses.
  - In the Migration Totals fields, the totals for Natural, Predict and user error message objects; and the number of errors detected; incomplete information in these fields indicates that the job is in process.
2. To follow the progress of the batch migration event job, enter Y (Yes) in the Refresh field.

An updated Migration Event Job Information window is displayed:

17:26:07	***** PREDICT APPLICATION CONTROL *****	2001-05-03
User UKMJ	+-----+ --- Migration Event Job Information --- +-----+	
Event ..... UKMJ_	Job ..... OS_MIGRATE_WORKFILE	
Application . UKMJ_	Submitted ..... 2001-05-03 at 17:26:09 by UKMJ	
From Status . UKMJ_	Started ..... 2001-05-03 at 17:26:09	
To Status ... CONTR	Ended ..... at	
Exec Mode ... COPY	Step number ..... 2 Versions created	
Scheduled ... _____	Migration Totals	
Notes ..... _____	NATURAL Objects ..... 35	
_____	FOREIGN Objects ..... 0	
Maintenance Reques	ErrMsg Objects ..... 12	
Processing State .	PREDICT Objects ..... 0	
Additional Options	Error Count ..... 0	
PAC7274: (I) Enter	Refresh ..... Y	
Command ==>	Compile being initiated	
+-----+		
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10---PF11---PF12---		
Help Menu Exit Opts ObLst Auth SUB Canc		

The Step Number field and the totals in the Migration Totals fields are updated as each step is completed. The audit message at the bottom of the screen (in this example, "Compile being initiated") is also refreshed.

3. Continue to press ENTER to refresh the information until the job ends. The end of the job is indicated by information in the Ended field and "7 Completed" in the Step Number field.
4. Type N over the Y in the Refresh field, then press ENTER to return to the Migration Event Submission Menu screen where the message "Migration event successfully submitted" is displayed.

If a job ABENDs or does not complete successfully, review the audit report of the job, correct the error, and restart the job. PAC determines the point of restart and continues processing at this point.

## Online Submission

The following Migration Event Submission screen is an example of the screen on which online migration events are submitted:

```

16:30:44          ***** PREDICT APPLICATION CONTROL *****          2000-04-30
User PACUSR          - Migration Event Submission -

Event ..... PROD_EVENT                      Modified: 1997-04-30 by SAGXX
Keys ..... /
Application .. ORD-EXAM_____
From Status .. CONTROL_____
To Status .... PRODUCTION_____
Exec Mode .... COPY Objects Online
Scheduled .... Y Date .. 1997-06-24 at 15:32

Notes ..... This event is scheduled to be activated in PAA on June 26____
_____
_____

Maintenance Request .. _____
Processing State ..... Authorized

Additional Options ... N

PAC7274: (I) Enter 'SUBMIT' to initiate Event.
Command ==> SUBMIT
Enter-PF1---PF2---PF3---PF4---PF5---PF6---PF7---PF8---PF9---PF10--PF11--PF12---
      Help Menu Exit Opts                      ObLst Auth          Sub          Canc

```

Note that the Exec Mode field specifies "COPY Objects Online".

1. Enter SUBMIT on the command line, or press PF10 (Sub).

The Migration Event Processing screens, as seen in the following two examples, show the progress of the online migration.

```

15:11:31          ***** PREDICT APPLICATION CONTROL *****          2000-07-23
User PACUSR          - Event Migrate Processing -

Event Name ... JRBW_TST_TO_PRD_01
Application .. JRBW_EAS
From Status .. TEST                      Lib .. JRBW-TST (238,028)
To Status .... PRODUCTION                Lib .. JRBW-PRD (238,028)
PAC6902: (A) Migration initiated at 1997-07-23 15:11 by SAGSI
PAC6905: (A) ACF system file assignment .. (238,083)
PAC6905: (A) PCF system file assignment .. (238,084)
PAC6920: (A) COPY Objects Online
PAC6904: (A) Applymods in effect for Migration .... (2,3,8,14,16)
*
PAC7020: (W) Application Lock applied at 1997-07-23 15:11.
PAC6903: (A) StepNo 1 completed at 1997-07-23 15:11:31
PAC7497: (A) GDA AutoExpand active for this Event.
PAC7498: (W) GDA AutoExpand has not added objects to List.
PAC6902: (A) Ver Lock initiated at 1997-07-23 15:11:32
PAC7080: (A) EAS-PROC.0002 (Proc) -- Locked
PAC7080: (A) EASFRAME.0002 (Map) -- Locked
PAC7080: (A) EASGDA.0002 (Global) -- Locked
PAC7080: (A) EASINCC.0002 (Map) -- Locked
PAC7080: (A) EASINCCI.0002 (Map) -- Locked
MORE

```

```

MORE 15:19:33          ***** PREDICT APPLICATION CONTROL *****          2000-07-23
User PACUSR              - Event Migrate Processing -

Event Name ... JRBW_DEV_TO_PRD_01
Application .. JRBW_EAS
From Status .. DEVELOPMENT                      Lib .. JRBW-DEV (238,028)
To Status .... PRODUCTION                      Lib .. * PACS * (238,084)

PAC6902: (A) Create Version initiated at 1997-07-23 15:19
PAC7051: (W) New version NOT required for EASGDA (Global).
PAC7057: (A) EASINPGM.0003 (Progrm) -- created.
PAC7057: (A) EASMNPMEN.0003 (Map) -- created.
PAC7057: (A) EASMNPGM.0003 (Progrm) -- created.
PAC7057: (A) EASMTPGM.0003 (Progrm) -- created.
PAC7053: (A) 5 Natural objects processed.
PAC6903: (A) Create Version completed at 1997-07-23 15:19
PAC6902: (A) Precompile initiated at 1997-07-23 15:19:40
PAC6906: (A) Compile List deleted at 1997-07-23 15:19:40
PAC7054: (A) 4 Natural objects to be Compiled.
PAC6903: (A) Precompile completed at 1997-07-23 15:19:40

MORE

```

2. When the migration event has completed processing, press ENTER to return to the Display Event screen.

If a job ABENDs or does not complete successfully, review the audit report of the job, correct the error, and restart the job. It is possible to restart a job (PAC determines the point of restart and continues processing at this point); or rerun the job from the beginning after the job has been backed out and then refreshed.

## Backing Out an Incomplete Migration Event

Once a migration event has been started, the application is locked and no other event for this application can proceed until the first migration event has been completed and unlocked.

If a migration event cannot be completed (for example, the database from which it is reading becomes inactive), then it may be backed out (aborted). This action will reverse any changes made, and will update the migration event itself with a step of "8" (migration event backed out).

The following methods can be used to access locked data:

- The UNLOCK command accesses a list of migration events that a user is authorized (in the user profile) to unlock;
- The PAC administrator may invoke the "Release Locked Data" function.

Note that at Step 6, no backout/release is possible.

## Migration Event Audit Report

An audit report is created when a migration event is being processed. The report gives a detailed listing of all actions that take place and any errors that occur in the form of PAC messages.

The audit report allows you to view information about a migration event from the time processing starts to the time it is completed/backed out/purged. Audit reports provide information about the status of migration events and the validity (occurrences and actions performed) of PAC migrations.

When the event is submitted, the resulting audit report may also be viewed as part of a batch report. The information in the audit report for the batch job may contain additional statistics or other audit information.

For example, during the compile process, the batch report provides a complete listing of all objects included in the compile; the audit report, on the other hand, retains information only about those objects that did not compile successfully.

## Displaying the Audit Report

Audit reports are available only for events which have been completed, backed out or purged.

To access the Audit Report, use Code R (Display Audit Report of Event) on the Migration Event Menu.

You may also access the Audit Report directly with the PF9 (Audit) key on the Display Migration Event screen, or in the Additional Options of the Display Migration Event screen.

The audit report is displayed on the Natural editor screen as shown in the following two examples.

Screen 1:

```

17:07:56          ***** PREDICT APPLICATION CONTROL *****          2000-07-20
Entity Migration Event                      Obj: ABC_TO_PROD_SCHED
>
> + TX: Audit Report
.....1.....2.....3.....4.....5.....6.....7.. Top
PAC6902: (A) Migration initiated at 1997-07-07 11:05 by SAGJV
PAC6905: (A) ACF system file assignment .. (235,061)
PAC6905: (A) PCF system file assignment .. (235,062)
PAC6920: (A) COPY Objects in Batch Using Workfile
PAC7020: (W) Application Lock applied at 1997-07-07 11:05.
PAC6903: (A) StepNo 1 completed at 1997-07-07 11:05:56
PAC7498: (W) GDA AutoExpand has not added objects to List.
PAC6902: (A) Ver Lock initiated at 1997-07-07 11:05:57
PAC7080: (A) ABC-EMPLOYEES.0001 (View) -- Locked
PAC7080: (A) ABCLDA1.0001 (Local) -- Locked
PAC7080: (A) ABCPGM1.0001 (Progrm) -- Locked
PAC7080: (A) ABCSRC1.0001 (Progrm) -- Locked
PAC7080: (A) SORCE1.0001 (Progrm) -- Locked
PAC6903: (A) StoreAud completed at 1997-07-07 11:05:58
PAC6903: (A) StepNo 2 completed at 1997-07-07 11:05:59
PAC6902: (A) Promotion initiated at 1997-07-07 11:05:59
PAC7042: (A) ABCLDA1.0001 (Local) -- Updated
PAC7044: (A) ABCPGM1.0001 (Progrm) -- Promoted
.....1.....2.....3.....4.....5.....6. S 34      L 1

```

Screen 2:

```

17:11:46          ***** PREDICT APPLICATION CONTROL *****          2000-07-20
Entity Migration Event                      Obj: ABC_TO_PROD_SCHED
>                                     > + TX: Audit Report
.....1.....2.....3.....4.....5.....6.....7... Bot
PAC7042: (A) ABCLDA1.0001 (Local) -- Updated
PAC7044: (A) ABCPGM1.0001 (Progrm) -- Promoted
PAC7545: (C) ABCPGM1.0004 (Progrm) -- Superceded by ver 0001
PAC7044: (A) ABCSRC1.0001 (Progrm) -- Promoted
PAC7545: (C) ABCSRC1.0004 (Progrm) -- Superceded by ver 0001
PAC7044: (A) SORCE1.0001 (Progrm) -- Promoted
PAC7545: (C) SORCE1.0002 (Progrm) -- Superceded by ver 0001
PAC7044: (A) ABC-EMPLOYEES.0001 (View) -- Promoted
PAC7545: (C) ABC-EMPLOYEES.0003 (View) -- Superceded by ver 0001
PAC7053: (A) 00000004 NATURAL objects processed.
PAC7053: (A) 00000001 PREDICT objects processed.
PAC6903: (A) StepNo 5 completed at 1997-07-07 11:06:07
PAC6903: (A) StoreAud completed at 1997-07-07 11:06:07
PAC6902: (A) Migrate was invoked at 1997-07-07 11:06:08
PAC6903: (A) Pre-Unld completed at 1997-07-07 11:06:08
PAC6902: (A) Unlock initiated at 1997-07-07 11:08:23
PAC6914: (W) Application Lock was removed at 1997-07-07 11:08:25
PAC6903: (A) Unlock completed at 1997-07-07 11:08:26
.....1.....2.....3.....4.....5.....6. S 34      L 17

```

The name of the migration event is displayed at the top of the screen. Every activity of the specified migration event is listed on the screens. The format of the audit report message is explained in a table following the audit report screens.

#### Note:

If asterisk (\*) notation was used in the object list for object type, the audit report interprets this as "GENERIC" because PAC does not know the object type at that point in the migration.

Press ENTER or use the Natural editor screen positioning commands to scroll through the audit report information. Refer to the PAC Reference documentation for the Natural editor commands.

To exit the Audit Report screen, enter a period (.) at the cursor position at the top of the screen and press ENTER.

## Audit Report Message Format

Audit report information is displayed in the following format:

**PPPnnnn (type) text**

where:

PPP is the product code. Valid values are as follows:

NAT = Natural

ESY = Entire System Server

DIC = Predict

PAC = Predict Application Control

PAA = Predict Application Audit

nnnn is the four-digit error or message number;

text is the actual text of the audit report message;

type is the audit report message type.

Valid audit report message types are described in the following table:

Code	Type	Explanation
(E)	Error	An error occurred and it must be reviewed by the user. Normally, PAC will terminate after this type.
(C)	Caution	An error may have occurred, but, depending on the circumstances, it may be ignored. The user should review all such errors.
(W)	Warning	The message is displayed to inform the user of an error or action that may be relevant for the results or subsequent actions that may take place for the request; for example, the consequences of actions.
(A)	Audit	The message is displayed for documentation reasons and enables the user to review all actions that occurred during the processing of the migration.
(I)	Information	This message is displayed to inform the user that a particular action has been completed or not completed.

## Audit Report Message Information

The audit report of a migration event includes the following information:

- Date and time, and by whom the job processing was initiated.
- Location of the application being migrated, and its Predict information.
- Date and time the information was recorded.
- List of objects that have been migrated including their version numbers, and object types, for example, "P" (Program).
- Steps or phases started/completed indicated by checkpoint messages; for example, "PAC6903 StepNo5 completed . . .".
- Restart information.
- Errors encountered.
- Expand options and the number of objects added as a result of the expansion.

You can use User Exit 28 (PACEX028) to "customize" the audit report by specifying the type of information to be written to the report.

## Migration Processing and Monitoring

As each job step of the migration is completed, audit messages are written to an audit report. This report may be viewed as each step is completed. You may access the audit report by invoking the Display Audit Report of Event (function code R) from the Migration Event Menu.

The RESET function backs out all actions that have occurred since the start of processing so that the migration event can be restarted from the beginning. The object list will be recreated and revalidated as well. The audit report is refreshed if the migration is reset before it reaches Step 6. If the migration is already at Step 6, the RESET command is ignored.

The RESET function can be used to correct migration processing information; for example, NATPARMS, steplib, work files, Natural library status, user exits, or applymods. Reset ensures that the current event is not preceded by another event; thus, the event is run from the start when submitted for processing and no other event is run for this

application until the reset event has been completed or backed out.

## Natural Application Processing Steps

The job steps are described as follows. Step numbers that are not listed are not used.

### Note:

Job steps are not the JCL/JCS steps.

### From Maintenance or Development

Step	Description
0	Job initialization - Interrogates the migration event request. - Locks the application for which the event is being run.
1	Job started - Deletes new object versions in the case of restart. - Expands the migration list as required. - Creates new object versions for each specified object. - Performs any rolling. - Copies all object versions from development/maintenance to the PCF system file (PAC work area). - Versions created.
2	Object compilation - Prepares and prioritizes the objects in a specific list for compiling. - Compiles the new objects on the PCF system file (PAC work area). - Processes and audits the compilation results.
4	Compile check point - Captures Natural CATAL report and audit results. - Promotes the object to the new status, unless the new status is Control or Retire.
5	Versions copied Versions all objects as cross-reference data by copying them to the ACF system file.
6	Object unload/load - Unloads the objects to be migrated. - Loads the objects into the destination location (To Status).
7	Application unlocked - Unlocks the application and any of the "held" objects. - Job completed. Prints an audit report.

If the Move option is in effect, the saved objects are removed/deleted from the origin status.

### Note:

If the job is backed out before Step 6, the object versions are deleted. The objects themselves are left intact regardless of the Move or Copy options.

### To Maintenance or Development

Step	Description
0	Job initialization - Interrogates the migration event request. - Locks the application for which the event is being run.
1	Expands the object list as required. If maintenance or development, verifies the Replace option for each object.
2	Copies each specific object version to the target location.
3	Creates a notification checkpoint if the destination status (To Status) is maintenance.
5	Promotes the objects to the new status.
7	Unlocks the application and any of the "held" objects. Job completed. Prints an audit report.

### From Control, To or From Test or Production

Step	Description
0	Job initialization - Interrogates the migration event request. - Locks the application for which the event is being run.
1	Expands the object list as required.
2	Determines the correct object versions to be processed.
4	Promotes the object to the new status, unless the new status is Control or development.
6	Unloads the object to be migrated. Loads the objects into the destination status (To Status).
7	Unlocks the application and any of the "held" objects. Job completed. Prints an audit report.

## Predict Application Processing Steps

Job steps are described as follows. Step numbers that are not listed are not used.

### Note:

For additional information about Predict, refer to the Predict documentation.

### From Development or Maintenance



Step	Description
0	Job initialization - Interrogates the migration event request.
1	Locks the Predict application - Expands the object list as required. - Deletes new object versions in the case of restart. - Creates the unload commands for the migration utility.
2	Unloads the Predict data from the origin location - Creates new object version for each specified object. - Stores the versioned Predict objects on the ACF system file.
3	Loads all userviews and verification rules to the PCF system file.
4	Generates views and rules.
5	Stores the versioned generated objects on the ACF system file.
6	Unlocks the application and any of the "held" objects.
7	Job completed. Prints an audit report.

### To or From Control, Test, or Production

Step	Description
0	Job initialization - Interrogates the migration event request.
1	Locks the Predict application - Expands the object list as required. - Creates the unload commands for the migration utility.
2	Unloads the Predict data from the origin location.
3	Loads all unloaded data to the specified Predict file.
5	Unlocks the application and any of the "held" objects.
7	Job completed. Prints an audit report.